

Attorney Docket No.: PTQ-0058
Inventors: Van Eyk et al.
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Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 33 with the following:

Restoration of arterial flow, also known as reperfusion, to ischemic living myocardium results in restoration of aerobic metabolism and salvage of the ischemic myocytes (Kloner et al. Circulation 2001 104:2981-2989). Upon reperfusion, the tissue develops reactive hyperemia ~~eased~~ caused by a 400% to 600% increase in blood flow. This increased blood flow reaches a peak during the first 5 minutes of reperfusion and then declines to normal control levels over the next 10 to 15 minutes. Excess O₂-derived free radicals also appear during the first minute of reperfusion and peak approximately 4 to 7 minutes after the onset of reperfusion. Generalized mitochondrial and cell swelling can be observed via electron microscopy during this period. ECG changes observed during ischemia disappear after 1 to 2 minutes of arterial reperfusion and a large amount of ATP is produced via rephosphorylation of the ADP and AMP that accumulated while the tissue was ischemic. Lactate decreases to control levels and the pH of the tissue returns to normal levels approximately 0.5 to 2 minutes after reperfusion (Kloner et al. Circulation 2001 104:2981-2989).